

## DOCUMENT RESUME

ED 387 482

SP 036 266

AUTHOR Jensen, Rita A.; And Others  
TITLE Fear of the Known: Using Audio-Visual Technology as a Tool for Reflection in Teacher Education.  
PUB DATE Feb 94  
NOTE 18p.; Paper presented at the Annual Meeting of the Association of Teacher Educators (74th, Atlanta, GA, February 12-16, 1994).  
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150) -- Tests/Evaluation Instruments (160)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Early Childhood Education; Elementary Education; Evaluation Methods; Higher Education; \*Informal Assessment; Microteaching; Practicums; \*Preservice Teacher Education; \*Reflective Teaching; \*Self Evaluation (Individuals); Special Education; \*Student Teachers; Student Teaching; Videotape Recordings  
IDENTIFIERS Preservice Teachers; \*Reflection Process; Reflective Practice; \*Video Technology

## ABSTRACT

Even though videotape technology has been found to be an effective tool for evaluation of student teachers, this technology is often not used to assess performance in preservice clinical experiences. The purpose of this study was to explore the use of video technology as a tool for reflection in teacher education. In the study, student teachers and junior level field experience participants were required to videotape three teaching segments and to use those teaching samples as avenues for reflection and self-assessment. Students completed written evaluations after each videotape session as well as a Preservice Teacher Reflection and Self Analysis survey. To provide a focus for their reflection, students were asked to consider three skill groups: interpersonal skills; instructional management and organizational skills; and questioning skills. Study results suggested that preservice teachers' focused observations and reflections on their own teaching yield more reliable and helpful information than their attempts to self-assess their overall teaching competency. Student teachers tended to be more specific and descriptive in their self-assessment than did junior level practicum participants, and both groups demonstrated they were better at assessing their interpersonal skills and instructional management competencies than at assessing their use of questioning strategies. The results of this study support the use of audiovisual technology as a tool for reflection in teacher preparation and suggest that preservice teachers could benefit from more instruction and experience in videotaping, self assessment, reflection, and questioning strategies. Attached tables include: videotape flowchart, videotape self-assessment evaluation forms, and the Preservice Teacher Reflection and Self-Analysis survey form. (ND)

FEAR OF THE KNOWN: USING AUDIO-VISUAL TECHNOLOGY  
AS A TOOL FOR REFLECTION IN TEACHER EDUCATION

Presented by:

RITA A. JENSEN & THERESE J. SHEPSTON  
Bradley University

KATHY CONNOR & NADINE KILLMER  
Iowa State University

The 74th Annual Meeting of the  
Association of Teacher Educators

February 12-16, 1994

PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

N. Killmer

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)"

U.S. DEPARTMENT OF EDUCATION  
Full Text Provided by ERIC  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as  
received from the person or organization  
originating it.
- Minor changes have been made to  
improve readability and clarity.
- Points of view or opinions stated in the  
document do not necessarily represent  
official ERIC position or policy.

2 BEST COPY AVAILABLE

## **Fear of the Known: Using Video Technology as a Tool for Reflection in Teacher Education**

**Rita A. Jensen**  
208 Westlake Hall  
Bradley University  
Peoria, IL 61625  
Office: 309-677-3191  
Home: 309-822-8158

**Therese J. Shepston**  
213 Westlake Hall  
Bradley University  
Peoria, IL 61625  
Office: 309-677-3201  
Home: 309-452-9897

**Nadine Killmer**  
N131 Lagomarcino Hall  
Iowa State University  
Ames, IA 50011  
Office: 515-294-7021  
Home: 515-225-1701

**Kathy Connor**  
N126 Lagomarcino Hall  
Iowa State University  
Ames, IA 50011  
Office: 515-294-8413  
Home: 515-232-1537

Rita Jensen is an Assistant Professor of Teacher Education at Bradley University, where she teaches elementary education courses and directs the University's Institute for Gifted and Talented Youth.

Therese Shepston is an Assistant Professor of Teacher Education at Bradley University, where she teaches early childhood education courses.

Nadine Killmer is a supervisor of student teachers for Iowa State's Department of Curriculum and Instruction.

Kathy Connor is Director of Project Opportunity and Coordinator of Elementary Student Teaching Supervisors for Iowa State's Department of Curriculum and Instruction.

## INTRODUCTION

The purpose of this study was to explore the use of video technology as a tool for reflection in teacher education. The authors' prior experience with supervising preservice teachers revealed that they often hesitate to videotape or even audiotape their teaching, even when encouraged to do so by their university supervisors and/or cooperating teachers.

Consequently, in this study student teachers and junior level field experience participants were required to videotape three teaching segments and to use those teaching samples as avenues for reflection and self-assessment. In order to provide a focus for their reflection, students were asked to consider three different skill groups: interpersonal skills, instructional management and organizational skills, and questioning skills.

In reviewing the literature on self-assessment, reflection, and the use of videotape, the authors of this study uncovered many findings. According to Koorland, Tuckman, Wallat, Long, Thomson, and Silverman (1985), self-assessment is the key to creating better student teachers. Programs that advocated videotaping of student teachers found that the technological medium of videotaping served as a catalyst for effective assessment of preservice teachers. The rapid growth of technical expertise in the field of teacher evaluation has made it possible to implement programs in which preservice teachers evaluate and make competency judgments based on observable behaviors (Thomson, 1992).

Even though videotape technology has been found to be an effective tool for evaluation of student teachers, a review of the literature points out that this technology is often not utilized to assess performance in preservice clinical experiences. While availability of camcorders within school programs was high (98.3%), teacher videotaping episodes (30.6%) and student teacher videotaping episodes (33.6%) were low (Anderson, Major, & Mitchell, 1990). The authors concluded that the reluctance to use videotaping stemmed from the discomfort that teachers and students experience when introducing new technology into the classroom. It was recommended that university supervisors initiate the utilization of videotaping as a helpful extension to the assessment program.

Moore (1988) focused on the importance of critiquing a videotape of the student teacher's classroom performance. According to Moore, it is imperative that the lesson be cooperatively analyzed by the student teacher and the supervisor. Since the videotape can be stopped at a particular point and reversed or fast forwarded, it is possible to focus on a specific detail and discuss reasons why the student did or said certain things. In addition, utilizing videotaping for teaching and supervision permits the supervisor to observe a greater number of lessons than would be possible with on site observations. The opportunity for self-reflection and analysis of the teaching segment is also provided since the students have the opportunity to see themselves "in action."

The authors of this study were particularly interested in preservice teachers' ability to develop effective question asking strategies. In reviewing the literature, they found that this has been a problem for some preservice teachers. Hougham (1992) found that student teachers had difficulty with question asking strategies. Students consistently asked questions with little variety and technique. An 8-week training program was implemented which focused on assisting students in improving their question asking strategies. The data indicated that students who received video evaluations improved their question asking strategies to a greater degree than students who did not receive video evaluations. Hougham recommended the following suggestions to improve the question asking strategies of preservice teachers:

- (1) Effective question asking strategies should be included as a component of all methods courses in the College of Education.
- (2) All education students should be required to videotape lessons in their methods courses and evaluate their question asking strategies.
- (3) Junior and senior student teachers should be videotaped, while performing practice teaching to improve their question asking strategies.

According to Thomson (1992), incorporating assessment terminology and guidelines into the teaching program and supplementing the learning with the utilization of videotaping as an evaluation mechanism are extremely effective practices in teacher preparation. This type of program is necessary to assist preservice teachers in affecting transitions to successful beginning teaching experiences.

### **METHODOLOGY**

The study described in this paper focused on the application of video technology to undergraduate teacher education. Subjects included student teachers and junior level field experience participants enrolled in teacher education programs at one public and one private university, where they are majoring in elementary education, early childhood education, and/or special education.

At the time of the study, subjects were involved in one of four different preservice practicums. Eight study participants were enrolled in junior level practicums, and 20 were enrolled in student teaching. As a total group, their mean age was 22.46 years, with all but one student falling into the 20 to 25 age range. Three subjects were male, 25 were female, and all 28 were Caucasian.

A necessary component of this study was access to camcorders and videocassette recorders. Many subjects found the equipment they needed was made available to them by the schools where they were completing their practicums. Other participants borrowed equipment from their colleges.

Five different assessment instruments were utilized in this study. Three open-ended instruments served to focus subjects' observations of their teaching. In the areas of interpersonal skills, instructional management and organizational skills, and questioning skills, participants identified strengths and growth areas and they completed sentence stems. (Tables 2,3 and 4)

The participants were given the opportunity to evaluate their experience of videotaping and assessing their own teaching on the "Videotape Self-Assessment: Evaluation of the Experience" form. Questions were primarily open-ended and addressed the structure and organization of the experience, as well as the assessment instruments utilized. (Table 5)

Finally, the "Preservice Teacher Reflection and Self-Analysis" instrument asked subjects to rate their performance numerically. Rather than focusing on any one particular teaching episode, they reflected on their overall teaching competencies by responding to several statements which were divided into the categories of: interpersonal skills, management of the learning environment, instructional strategies, and organization. (Table 6)

Prior to undertaking the study described here, the authors conducted a small pilot study. Based on the results of that study, as well as interviews with its participants, modifications were made in the instrumentation, as well as the study procedures.

Because of the variations that existed in the four different practicum experiences in which subjects were enrolled, procedures the groups followed were not identical. For example, the length of the practicums ranged from eight to sixteen weeks. Consequently, the timelines for videotaping had to be modified to fit the situation.

In addition, four different university supervisors were involved in the study, two of whom were not involved in planning the project. Therefore, in those two cases, a principal investigator described the project to them and solicited their participation. However, it was the university supervisors who, in all four cases, introduced the project to their particular practicum students.

The flowchart (Table 1) illustrates the sequence of the study's procedures. During the project introduction, participants learned that they would be videotaping three teaching samples and reflecting on three different skills areas. The project then proceeded with the first videotaping, which was followed by the subjects' completion of the "Videotape Self-Assessment 1: Interpersonal Skills." After the second videotaping, participants completed "Videotape Self-Assessment 2: Instructional Management and Organizational Skills," and after the third videotaping they responded to "Videotape Self-Assessment 3: Questioning Skills." (Tables 2, 3 and 4)

At the conclusion of their practicums, students identified both the assets and limitations of their experiences in utilizing audio-visual technology as a tool for reflection by completing the "Videotape Self-Assessment: Evaluation of the Experience." In addition, participants assessed their overall teaching competencies through use of the "Preservice Teacher Reflection and Self-Analysis." (Tables 5 and 6)

Subjects' responses to the "Preservice Teacher Reflection and Self-Analysis" were analyzed using a statistical package entitled Statview. All other instrumentation featured open-response formats.

Consequently, data analyses took the form of uncovering patterns, categorizing responses, and identifying recurring themes.

## RESULTS

An analysis of the "Preservice Teacher Reflection and Self-Analysis Form" revealed means exceeding 4.0 (on a five point scale, where one was low and five was high) for all but 1 of the 51 items. The exception was item 4 of the Interpersonal Skills Section, which reads: "I remain calm and poised during trying or unusual circumstances." The mean for this item was 3.93. Since the quantitative results appeared skewed, the qualitative results became the main focus of the data analyses.

### Interpersonal Skills: Video 1

Participants reported having a difficult time consistently identifying strengths and growth areas when reviewing the videotaping of a lesson. Many judged their interpersonal skills in an evaluative, affective mode, such as, good, pretty good, ok, fair, great, excellent or fine. Those who were more specific in focusing on observable behaviors when viewing the videotape of their lesson made comments such as, "I say 'yeah' and 'gonna' too much."

In most cases, the open-ended sentence stems that were provided for participant response elicited more appropriate and useful feedback. The researchers also noticed that the student teachers' comments were more focused than junior level practicum students' comments.

The more specific student teachers comment's included, "I need to get rid of my college humor;" and "I need to keep the whole class in view and attend to individuals, and I still need to improve on picking up student signals." Junior level students noted more generally, "I would have been more calm if I would have used the right behavior techniques;" and "I have a hard time saying what I want to."

### Instructional Management and Organizational Skills: Video 2

When assessing their instructional management and organizational skills, many participants once again focused on general, evaluative comments rather than on observable behaviors. Those students who were more specific in focusing on observable behaviors when viewing the videotaping of their lesson made comments such as, "I wasted a great deal of time waiting for the class to be quiet;" "I need to tell the class my expectations before the lesson--not after;" and "I could have given different goals to different groups to vary the task a little bit."

Responses to the open-ended sentence stems elicited a wide variety of responses. The following sentence completions are representative of participants' responses. (Again student teacher comments were more reflective and focused than those of junior level participants.) Student teachers stated, "Even though I do use some manipulatives, I could probably use more," and "My smooth-flowing activity progressed

from brainstorming to discussion to activity." Junior level student's more general responses were, "I didn't really pace myself;" "I just went with it;" and "I was lacking in motivational techniques."

### **Questioning Skills: Video 3**

The "Videotape Self-Assessment 3: Questioning Skills" proved to be the most difficult instrument for participants to utilize. They seemed to have particular difficulty in assessing question levels and question types. Respondents frequently commented that they were not questioning students at levels above comprehension, and they included many evaluative comments such as, pretty good, often, okay, excellent, great and not too bad usually.

Respondents who focused on observable behaviors when critiquing their videotapes made comments such as the following; " I asked a lot of recall questions which is okay, but I should move to higher levels;" "I tried to ask a lot of questions, but the tape showed I could ask a lot more!" "Wait time can be improved. I'm pretty quick to give feedback after a student answers."

Participants also completed open-ended sentence stems pertaining to their questioning skills, and as before, student teachers offered more specific reflective responses. Student teachers remarked, "In the future I would ask more in-depth questions because the students had more knowledge than I thought;" "I included all levels of questioning skills without really thinking about it!" and " I could improve by making an effort to tune in to individual differences." Junior level students answered, "I'm not quite sure about evaluation questioning;" and "My questions could have been more thought out."

### **CONCLUSIONS AND RECOMMENDATIONS**

Through the use of audio-visual technology, preservice teachers saw and heard their own work. Viewing and listening to themselves in the teaching role enabled them to reflect on the quality of their work, to assess their strengths and to identify areas in need of their attention. In reviewing videotapes of their teaching, participants' attention was focused on particular aspects of the teaching/learning process.

Study results suggest that preservice teachers' focused observations and reflections of their own teaching yield more reliable and helpful information than their attempts to self-assess their overall teaching competency. Although some participants found the reflection forms somewhat restricting, when required to analyze one particular aspect of the teaching process (e.g., interpersonal skills), they tended to be more reflective and more realistic than when simply considering their overall teaching skills.

Means for all but one of the 51 items included on the "Preservice Teacher Reflection and Self-Analysis" exceeded 4.0 (on a five point scale where one was low and five was high). Given the fact that the respondents are all "works in progress" who have not yet completed an undergraduate teacher preparation program, the authors of the study were concerned that students in both the student teaching and junior level teaching experiences rated their performances at such high levels. It appears that students

may need additional instruction in realistically rating their performance and recommending specific suggestions or interventions which will improve their preservice teaching.

Student teachers tended to be more specific and descriptive in their self-assessment attempts, than did junior level practicum participants, who more often used general evaluative phrases, such as "very good." Both groups demonstrated they were better at assessing their interpersonal skills and instructional management competencies than at assessing their use of questioning strategies. In addition, both student teachers and junior level practicum participants reported they felt less confident in their ability to assess their questioning strategies than in their ability to assess their interpersonal skills and instructional management competencies.

The results of this study support the use of audio-visual technology as a tool for reflection in teacher preparation. Although there are modifications that can continue to be made in the procedures and instrumentation utilized, it seems clear that preservice teachers can benefit from focused observations and assessments of their own teaching. As such, the authors view self-assessment and reflection of videotaped teaching samples as a viable practice for teacher educators to explore further, as it seems to hold the potential for assisting preservice teachers in their development. The results of this study suggest that further refinement is necessary, both in terms of procedures and instrumentation. Future studies could compare different response formats and ways in which the experience is structured.

Study results also indicate that preservice teachers could benefit from more instruction and experience with videotaping, self-assessment and reflection in general, and with questioning strategies in particular. Consequently, attempts to provide such instruction and to evaluate the effectiveness of such attempts constitute a possibility for further study.

Another option for exploration is studies which compare and contrast participants' self-assessments of their teaching with the assessments of university supervisors, cooperating teachers, and/or peers. Such a focus could reveal differences in evaluation standards, priorities, and the experiential base which the different groups would bring to the task of preservice teacher assessment.

Finally, it might prove informative to conduct studies of a larger scale which compare the results of student teachers' and junior level practicum participants' attempts at utilizing audio-visual technology as a tool for self-assessment and reflection. In doing so, researchers might choose to provide preservice teachers with a second, or even a third, experience with using videotaping of their teaching as an avenue for self-assessment and reflection. Such studies would allow investigators to track participants' progress and development in terms of variables such as ease of implementation and sophistication of responses. Equally important to analyze would be similarities and differences in subjects' perceptions of their first, second, or third experiences.

## REFERENCE LIST

Anderson, D. J., Major, R. L., & Mitchell, R. R. (1990). The VCR and student teachers. MNATE Newsletter, 20 (3), 5-6.

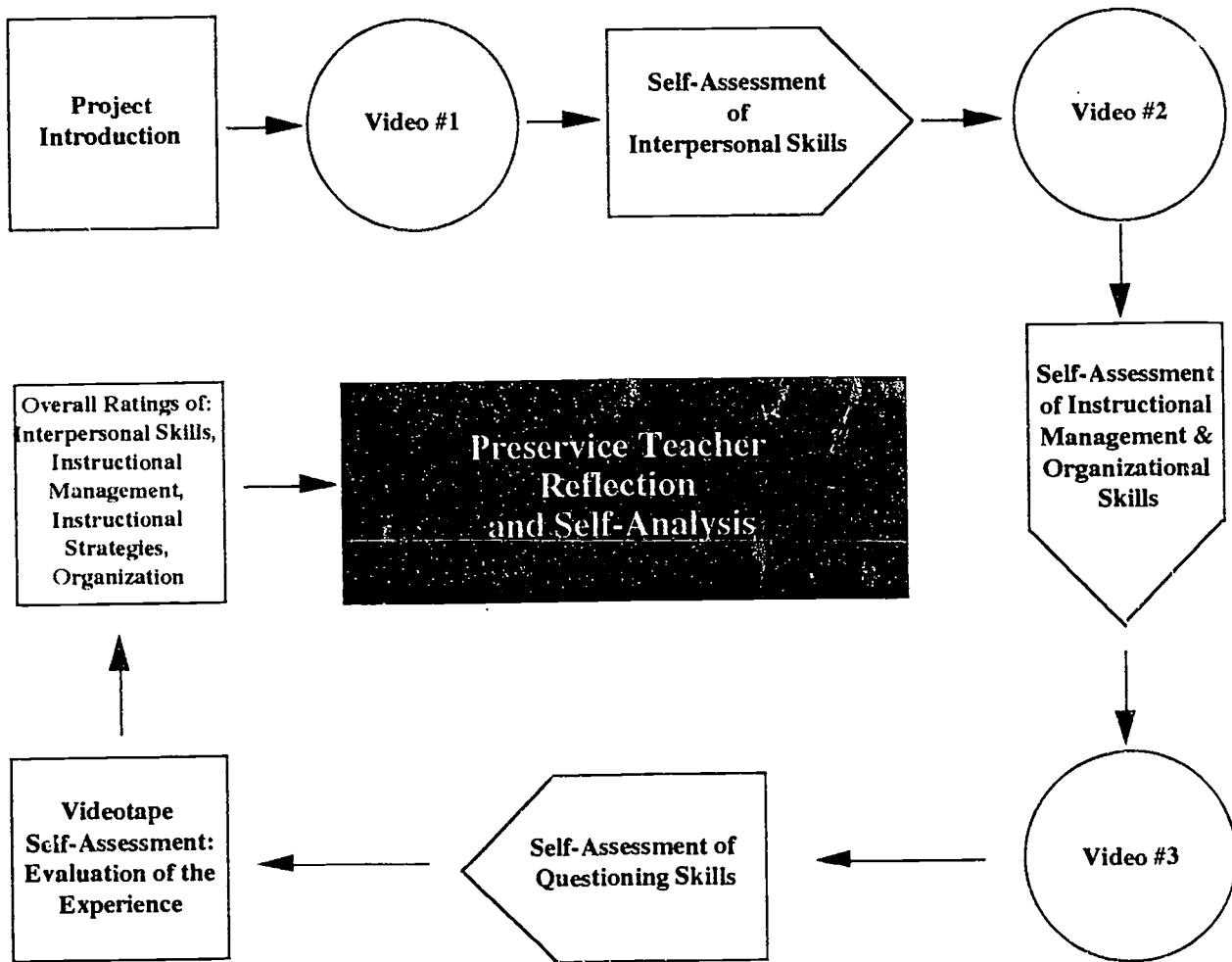
Hougham, P. (1992). Improving student teachers' strategies for asking a range of both high and low level questions through video evaluation. Fort Lauderdale, FL: Nova University. (ERIC Document Reproduction Service No. ED 349 309)

Koorland, M., Tuckman, B., Wallat, C., Long, B., Thomson, S., & Silverman, M. (1985). A pilot evaluation of the pre-ed program: An innovative student-teacher supervision model. Educational Technology, 25(10), 45-47.

Moore, S. (1988). Seeing is believing: Supervision of teaching by means of video tape. Action in Teacher Education, 10(2), 47-49.

Thomson, W. S. (1992). Using videotape as a supplement to traditional student teacher supervision. (ERIC Document Reproduction Service No. ED 357 014)

**Table 1**  
**VIDEOTAPE FLOWCHART**



**Table 2**  
**VIDEOTAPE SELF-ASSESSMENT 1:**  
**INTERPERSONAL SKILLS**

**ORAL COMMUNICATION**

Verbal fluency  
 Appropriate volume  
 Articulation  
 Appropriate usage

**WRITTEN COMMUNICATION**

Verbal fluency  
 Appropriate usage  
 Correct spelling  
 Legible handwriting  
 Correct punctuation and capitalization

**NON-VERBAL COMMUNICATION**

Eye contact  
 Approachability  
 Positioning in room  
 Posture  
 Interaction patterns  
 Facial expressions

**AFFECTIVE QUALITIES**

Accepting and tolerant  
 Encouraging and supportive  
 Friendly and warm  
 Appropriate use of humor  
 Calm, in spite of conflicting demands  
 Attentive and responsive to students' needs & interests

*After completing each videotape ...these reflective questions were also answered.*

1. I felt really good about...
2. I was uncomfortable with...
3. The decision I made during the lesson that stays most in my mind was...
4. I had problems with...
5. The thing that surprised me most about the students was...
6. Things I would do differently next time include...(state why)
7. When I think about teaching, learning, and the learning process, I learned...

**Table 3**  
**VIDEOTAPE SELF-ASSESSMENT 2:**  
**INSTRUCTIONAL MANAGEMENT & ORGANIZATIONAL SKILLS**

**MATERIALS & SPACE**

Printed materials  
 Audio-visual media  
 Manipulatives  
 Room arrangement

**TIME**

Punctuality  
 Transitions  
 Pacing  
 Efficient distribution and  
 collection of student materials

**STUDENTS**

Appropriate grouping arrangements  
 Clear articulation of  
 directions and expectations  
 student-to  
 student interactions  
 Responsiveness to student interests  
 Appropriate use of conflict resolution  
 strategies

**LESSON**

Organization & sequence  
 Student involvement  
 Communication of Facilitation of  
 objective(s)  
 Motivational techniques  
 Appropriate assessment  
 techniques

*After completing each videotape ...these reflective questions were also answered.*

1. I felt really good about...
2. I was uncomfortable with...
3. The decision I made during the lesson that stays most in my mind was...
4. I had problems with...
5. The thing that surprised me most about the students was...
6. Things I would do differently next time include...(state why)
7. When I think about teaching, learning, and the learning process, I learned...

**Table 4**  
**VIDEOTAPE SELF-ASSESSMENT 3:**  
**QUESTIONING SKILLS**

**ORAL QUESTIONING**

Predictable versus random calling on students  
 Analysis of response patterns by gender  
 Analysis of response patterns by race  
 Consideration of individual differences  
 Wait time  
 Use of follow-up questions that build on student responses  
 Clarity of phrasing  
 Fluency of phrasing  
 Question frequency

**QUESTION LEVEL**

Knowledge  
 Comprehension  
 Application  
 Analysis  
 Synthesis  
 Evaluation

**QUESTION TYPES**

Focusing questions (establish a mental set; a purpose for reading or listening) Extending questions (elicit additional information at the same comprehension level) Clarifying questions (encourage returning to a previous response for further clarification, explanation, or redefinition)  
 Raising questions (obtain additional information on the same subject but at a higher comprehension level)

*After completing each videotape ...these reflective questions were also answered.*

1. I felt really good about...
2. I was uncomfortable with...
3. The decision I made during the lesson that stays most in my mind was...
4. I had problems with...
5. The thing that surprised me most about the students was...
6. Things I would do differently next time include...(state why)
7. When I think about teaching, learning, and the learning process, I learned...

**Table 5**  
**VIDEOTAPE SELF-ASSESSMENT:**  
**EVALUATION OF THE EXPERIENCE**

1. What did you gain from this experience?
2. How did you feel about being videotaped?
3. How did you feel about watching yourself on videotape?
4. On a scale from 1-10, with 10 being high, how successful do you feel you were at assessing your teaching in the three areas identified on forms you completed?

Provide the rationale for your ratings.

- A. INTERPERSONAL SKILLS
- B. INSTRUCTIONAL MANAGEMENT AND ORGANIZATIONAL SKILLS
- C. QUESTIONING SKILLS

5. What would enable you to better assess your teaching in these areas?
6. What skills are necessary to increase your ability to engage in self-analysis and reflection?
7. Please comment on the extent to which the evaluation forms were helpful to you.
  - A. Did they help you focus your observations?
  - B. Did you find them restricting in any way?
  - C. Did they omit important aspects of the teaching/learning process?
  - D. How long did it take you to view a videotape and complete the corresponding evaluation form?
  - E. How could the forms be improved?
8. How many videotapes and observation forms did you complete?
9. What were the strengths of this videotaping and self-assessment experience?
10. How can this videotaping and self-assessment experience be improved for future use?

**Table 6**  
**PRESERVICE TEACHER REFLECTION AND SELF-ANALYSIS**

USING A FIVE-POINT SCALE WHERE **ONE IS LOW AND FIVE IS HIGH**, PLEASE RATE YOUR PERFORMANCE IN EACH OF THE FOLLOWING AREAS. INDICATE YOUR RESPONSES BY CIRCLING ONE NUMBER FOR EACH ITEM.

**INTERPERSONAL SKILLS**

1. I quickly establish a comfortable rapport with my students.	1   2   3   4   5
2. My students feel free to ask for my assistance.	1   2   3   4   5
3. My interactions with students are characterized by smiles and personal greetings.	1   2   3   4   5
4. I remain calm and poised during trying or unusual circumstances.	1   2   3   4   5
5. I am fair, positive, and pleasant when dealing with students.	1   2   3   4   5
6. I can accurately communicate to parents and staff what a student generally can or cannot do.	1   2   3   4   5
7. I utilize humor appropriately in my interactions with students, parents, and staff.	1   2   3   4   5
8. I make myself available to students, parents, and staff.	1   2   3   4   5
9. I demonstrate professionalism in my interactions with students, parents, and staff.	1   2   3   4   5
10. I maintain frequent and open communication with school and university personnel.	1   2   3   4   5

**MANAGEMENT OF THE LEARNING ENVIRONMENT**

1. I clearly communicate behavior expectations to my students.	1   2   3   4   5
2. I consistently and fairly enforce class rules.	1   2   3   4   5
3. I structure my teaching so all students can understand the learning task.	1   2   3   4   5
4. I create a learning environment that allows students to be successful.	1   2   3   4   5
5. I facilitate an environment of trust, openness, and mutual respect.	1   2   3   4   5

6. For both my students and myself, I value productivity and results, rather than just activity	1 2 3 4 5
7. I act with reliability and dependability so my students will know how to act.	1 2 3 4 5
8. I set high, but reasonable, standards and expectations for my students.	1 2 3 4 5
9. I learn from, as well as about, my students by listening, observing, and asking questions.	1 2 3 4 5
10. I model for my students the importance of maintaining a positive attitude.	1 2 3 4 5
11. I encourage my students to take intelligent risks.	1 2 3 4 5
12. I let my students know that it is okay to be different.	1 2 3 4 5
13. I let my students know that it is okay to make mistakes.	1 2 3 4 5
14. I make learning fun, interesting, and enjoyable.	1 2 3 4 5
15. My students generally pay attention and are actively involved in the task of learning.	1 2 3 4 5
16. I display unmistakable enthusiasm about my subject matter with my students.	1 2 3 4 5

#### INSTRUCTIONAL STRATEGIES

1. I provide appropriately challenging instruction for my students.	1 2 3 4 5
2. I clearly communicate information and task expectations to my students.	1 2 3 4 5
3. I provide a variety of appropriate, hands-onlearning activities for my students.	1 2 3 4 5
4. I provide my students with ample opportunities to learn.	1 2 3 4 5
5. I am responsive to students' ideas and find ways to incorporate them in my teaching.	1 2 3 4 5
6. I provide my students with appropriate and frequent feedback	1 2 3 4 5
7. I clearly communicate to my students the purpose and/or objectives for each activity.	1 2 3 4 5
8. I make appropriate use of previewing, reviewing, and summarizing.	1 2 3 4 5

9. I emphasize important points by using structuring comments and by signaling transitions.	1   2   3   4   5
10. I frequently ask higher order questions that require students' thoughtful examination of a position.	1   2   3   4   5
11. I encourage and welcome students' questions.	1   2   3   4   5
12. After posing questions, I use pauses to stimulate students' thinking.	1   2   3   4   5
13. I encourage students to make choices about their own learning.	1   2   3   4   5
14. I allow and encourage students to engage in active problem-solving.	1   2   3   4   5
15. I challenge students to discover several different answers and solutions to questions and problems.	1   2   3   4   5
16. I help students build bridges between what they are learning and what they already know.	1   2   3   4   5
17. I use appropriate means of assessing student learning.	1   2   3   4   5

### ORGANIZATION

1. I plan carefully for class, rather than relying on my ability to "fly by the seat of my pants."	1   2   3   4   5
2. I closely attend to details (e.g., sufficient student materials, special arrangements).	1   2   3   4   5
3. I make it a point to be in my classroom on time.	1   2   3   4   5
4. I make arrangements for special speakers, field trips, and audio-visual needs well in advance.	1   2   3   4   5
5. I make wise use of class time in order to increase students' opportunity to learn.	1   2   3   4   5
6. I accomplish record-keeping in an efficient and effective manner.	1   2   3   4   5
7. I conduct meaningful pre- and post-assessments and utilize their results in my teaching.	1   2   3   4   5
8. I am personally efficient and well organized.	1   2   3   4   5